IN THE SPECIFICATION

1. Please amend paragraphs [0016]-[0017] as follows:

[0016] FIG. 1 illustrates a network structure for explaining a concept of a public/private mobile communication service according to an embodiment of the present invention. In order to provide both the public and private mobile communication services, an embodiment of the present invention, as shown in FIG. 1, includes a public/private common cell area 14 which is a public/private common communication service area, and a public/private communication service unit 12. Preferably, the public/private common cell 14 is set to provide a convenience of the communication service to a specific group. For example, when a certain company uses (occupies) one building, the area belonging to the building can be defined as the public/private common cell 14. The public/private common cell 14 is preferably defined by mutual agreement with the public mobile communication service provider. This is to have a private BTS (Base station Transceiver Subsystem) 8k in the public/private common cell 14 be recognized as a public BTS from the viewpoint of the public mobile communication system. In the following description, the private BTS 8_k will be referred to as ~~ApBTS@~~ pBTS8_x, in order to distinguish the private BTS 8_k in the public/private common cell 14 from the BTSs belonging to the public mobile communication system, i.e., the BTSs 6_1-6_k and 8_1 shown in FIG. 1. The pBTS 8_k, together with a mobile station (MS) 24 in the public/private common cell 14, forms a radio communication path, performs a function of managing the radio resources, and is connected to a BSC (Base Station Controller) 4_m of the public mobile communication system through the public/private communication service unit 12. The public/private communication service unit 12 is connected to BSC 4_m, PSTN/ISDN (Public Switched Telephone Network/Integrated Services Digital Network) 16, and IP (Internet Protocol) network 18. The public/private communication service unit 12 optionally provides the public mobile communication service and the private mobile communication service to the MSs (e.g., the MS 24) in the public/private common cell 14. If the MS 24 is registered in the public/private communication service

unit 12 to be provided with the private mobile communication service, the MS 24 can be provided with not only the public mobile communication service but also the private mobile communication service. However, if the MS 24 is not registered in the public/private communication service unit 12 for the private mobile communication service, the MS 24 can be provided with only the public mobile communication service. In addition, the public/private communication service unit 12 also performs a wire communication service with the PSTN/ISDN 16 and the IP network 18.

[0017] Meanwhile, the public mobile communication network is commonly called a ~~Apublic~~ public land mobile network ~~(PLMN)@~~ (PLMN). As illustrated in FIG. 1, the public mobile communication system includes a plurality of mobile switching centers (MSCs) 2_1-2_n, a plurality of base station controllers (BSCs) 4_1-4_m, a plurality of BTSs 6_1-6_k and 8_1-8_k, a plurality of mobile stations (MSs) 20, 22 and 24, and a HLR/VLR (Home Location Register/Visitor Location Register) 10. Each of the MSCs 2_1-2_n is connected to its associated BSCs 4_1-4_m, and each of the BSCs 4_1-4_m is connected to its associated BTSs 6_1-6_k and 8_1-8_k. In particular, the pBTS 8_k is one of the BTSs 8_1-8_k connected to the BSC 4_m of the public mobile communication system according to an embodiment of the present invention. The MSCs 2_1-2_n each control the connection between the BSCs 4_1-4_m connected thereto and the PSTN/ISDN 16 or another MSC in the public mobile communication network. The BSCs 4_1-4_m each perform the radio link control and handoff functions, and the BTSs 6_1-6_k and 8_1-8_k perform the functions of forming the radio communication paths to the MSs 20, 22 and 24 belonging to their communication service area, i.e., their cell area and managing the radio resources. In the HLR/VLR 10, the HLR has a subscriber location registration function and a database function for storing the subscriber information, and the VLR has a database function for temporarily storing information about the MS existing in the cell managed by a corresponding one of the MSCs 2_1-2_n. If the MS moves to a cell managed by another MSC, the corresponding information stored in the VLR is deleted. In the following description, a communication service area for the BTSs 6_1-6_k and 8_1 of the public mobile communication system will be

called a ~~Apublic-only cell area@,~~ public-only cell area 15, in order to distinguish it from the public/private common cell area 14. For example, in FIG. 1, a communication service area for the BTS 8_1 among the BTSs 6_1-6_k and 8_1 of the public mobile communication system is defined as a public-only cell area 15. Commonly, the public-only cell area 15 is much wider than the public/private common cell area 14, which is set to provide a convenience of the communication service to a specific group.

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2. Please amend paragraph [0024] as follows:

[0024] The call manager 50 of FIG. 3 is connected to the pBSC' 40 and the LAN 90. The structure and operation of the call manager 50 will be described below in detail. The call manager 50 has the function of controlling a wireless call for the public and private mobile communication services. Here, a call service for the MS of the public mobile communication network is such controlled that a message should be bypassed to the public MSC. In addition, the call manager 50 has a function of managing and maintaining the radio resources. However, resource management for the pBTS 8_k is controlled by the public MSC 2_1 and the call manager 50 only consults the resource management. Further, the call manger 50 has a function of loading a program for a processor for controlling the pBSC resource and loading PLD (Program Loaded Data). However, program loading for the pBTS 8_k is managed by a public BSM (Base Station Manager; not shown). In addition, the call manager 50 controls a wire/wireless complex function. Moreover, the call manager 50 supports a wireless in-company short message service (SMS) function, and has an SMS function for that purpose. In addition, the call manager 50 supports a registration function for a private mobile communication network subscriber and a function setting function, and has a VLR management function for roaming the MS registered in the private mobile communication network. In order to perform such functions, the call manager 50, as shown in FIG. 4, includes such software blocks as a DCI (Data Communication Interface) 52, a pBTMR (pBTS Message Router) 54, a pBSC (private BSC) 56, a pMSC (private MSC) 58, a PMIC (PBX Mobile Interface Controller)

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60, an SMC (Short Message service Controller) 62, a pVLR (private VLR) 64, a WSM (Wireless System Manager) 66 and a LIM (LAN Interface Module) 68. In FIG. 4, the DCI 52 is an interface module for interfacing communication between the pCIN 42 in the pBSC' 40 and the call manager 50, and manages inter-process communication (IPC) through HINA (High Capability IPC Processor Assembly). The pBTMR 54 is a module for managing path designation over every message to be processed in the pBTS 8_k. More specifically, the pBTMR 54 designates a signaling message path for public/private call origination and termination services of the MS by consulting a router table therein, and designates a message path for a maintenance service of the pBTS 8_k. In addition, the pBTMR 54 communicates with the pVLR 64. The pBSC 56 is a main controller of the pBSC' 40 shown in FIG. 2 and controls the pBTS 8_k. In supporting both the public mobile communication service and the private mobile communication service, the pMSC 58 is interposed between the pBSC 56 and the PMIC 60 to perform a function corresponding to the function performed by the MSC of the existing public mobile communication network. In addition, the pMSC 58 fundamentally processes a ~~subscriber=s~~ subscriber's call, analyzes additional services and performs interfacing for interworking with the PBX 30. More specifically, the pMSC 58 analyzes the ~~subscriber=s~~ subscriber's call service request, works out a fundamental strategy as to whether to process the requested service as the existing public mobile communication network service or the private mobile communication network service, and defines the corresponding procedure. For interfacing with the pBSC 56, the pMSC 58 follows the procedure of the existing public mobile communication network, and for mutual interfacing, uses the IPC (Inter-Processor Communication). The PMIC 60 is a module for controlling a wire/wireless complex function. The PMIC 60 is a module, which exists in the public/private common cell area 14, and controls a call among the MSs (e.g., MS 24 shown in FIGS. 1 and 2) registered for the private mobile communication service, the MS 25 shown in FIG. 2, and the wire terminals connected to the PBX 30. Unlike the existing public MSC, the pMSC 58 cannot perform the switching function. Since the pMSC 58 is a software block, it does not have

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the switch as in the public MSC. Therefore, when providing the private mobile communication service, the public/private communication service unit 12 according to the present invention uses the switch 32 in the PBX 30. In the embodiment of the present invention, a module of the PMIC 60 exists between the pMSC 58 and the PBX 30. The PMIC 60 generates a command for controlling the switch 32 in the PBX 30 in response to a switch control request, and applies the generated command to a controller (not shown) of the PBX 30. The controller of the PBX 30 then performs a switch control operation according to the command. The SMC 62 is a module for managing a short message service (SMS) control function and an SMS web server function. The pVLR 64 is a module for managing the private mobile communication service-registered subscriber information, the private mobile communication subscriber=s location registration information, and various functional service information. To the pVLR 64 is connected a database 76 for storing the above information. The WSM 66 maintains and manages the whole mobile communication service function provided from the public/private communication service unit 12. To the WSM 66 is connected an operator console 78 for interfacing with the operator. The LIM 68, a module for managing communication with the LAN 90, is comprised of a LIM 69 in the PMIC 60, a LIM 70 in the SMC 62, a LIM 72 in the pVLR 64, and a LIM 74 in the WSM 66. The LIMs 69, 70, 72 and 74 manage communication with their associated modules of the PMIC 60, the SMC 62, the pVLR 64 and the WSM 66, respectively, through the LAN 90 using an operating system (OS).

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3. Please amend paragraph [0032] as follows:

[0032] Next, the call originating service according to an embodiment of the present invention will be described in detail with reference to FIGS. 1 to 7. FIG. 6 is a diagram for explaining the call originating service according to an embodiment of the present invention, and FIG. 7 illustrates a packet message structure. In FIG. 7, a DEST_ADDR field is a field where a destination address is recorded, and a SRC_ADDR field is a field where a source address is recorded. Further, a TYPE field is a field for recording the

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message type which indicates whether the message is a control message or a traffic message. A LENGTH field is a field for recording length information of the message MSG, and a SIG_ID field is a field where signaling type (call origination or call termination) information is recorded. A DEST_SUB_ID field is a field for recording a designated ~~processor=s~~ processor's ID out of the processors belonging to the other ~~party=s~~ party's device. A SRC_SUB_ID field is a field for recording a designated ~~processor=s~~ processor's ID out of the processors belonging to the calling ~~party=s~~ party's device. A MSG field is a field where a message is recorded.

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